

REMARKS

Claims 1-39 are pending. Claims 7, 14, 19, and 25 stand withdrawn. By this Amendment, no claims are cancelled, amended or added.

Request to Remail Office Action and Restart Period for Reply Due to Office Error

On August 15, 2007, Applicant filed a written request with the Office pursuant to MPEP § 710.06 to remail and restart the period for reply of the July 18, 2007, Office Action due to deficiencies in the Action that make it impossible for Applicant to provide a full reply. Specifically:

1. No status (e.g. allowed, rejected, objected to, withdrawn) is given for pending claims 30-39 in the Office Action Summary.
2. The Office Action Summary indicates that claims 1-6, 8-13, 15-18, 20-24 and 26-29 are rejected. The Detailed Action, however, indicates that claims 18, 20-23, and 30-35 are rejected under 35 U.S.C. § 112 and that claim 1 is rejected under 35 U.S.C. § 102. No grounds of rejection or rationale are provided for claims 2-6, 8-13, 15-17, 24, 26-29 or 36-39, thereby making the basis upon which these claims are rejected or objected to unclear and rendering it impossible to respond.
3. Although the Office Action Summary indicates that the drawings are accepted by the Examiner, the Detailed Action indicates that the drawings are objected to under 37 CFR 1.83(a), making it unclear as to whether the drawings are or are not objected to. Moreover, the drawing objection stated in the Detailed Action (e.g. the drawings must show "planetary gearing" or said feature must be cancelled from claims 18 and 30),

appears to be based on a misreading of the claims and an erroneous understanding of the disclosed inventions. Claims 18 and 30 do not simply claim “planetary gearing.” Rather, these claims recite “a planet gear arm” and a “sun gear” Applicant directs the attention of the Office to paragraph 0046 of the published application, wherein a “planet gear arm” is clearly identified as reference numeral 172 and a “sun gear” is clearly identified as reference numeral 174. Structure corresponding to reference numerals 172 and 174 is depicted in at least Figures 4 and 5. Accordingly, Applicant submits that no drawing objection is warranted and none should be included in a reissued Office Action.

4. Although the Office Action Summary contains no indication that the specification is objected to by the Examiner, the Detailed Action indicates that the specification is objected to based on some unspecified legal authority, making it unclear as to whether the specification is or is not objected to. Moreover, the stated objection (e.g. “the use of ‘planetary gearing’ terminology is inconsistent with industry accepted terms”) appears to be based on an erroneous understanding of the disclosed inventions. Structure 172 is appropriately termed a “planet gear arm” because its axis of rotation translates about the circumference of gear 174 as structure 172 rotates. The axis of rotation of gear 174 remains fixed and does not translate – hence, it is properly termed a “sun gear.” These elements exhibit epicyclic (i.e. planetary) motion relative to each other and in fact are exemplary of a classic four-bar planetary gear train. Accordingly, Applicant submits that no specification objection is warranted and none should be included in a reissued Office Action.

These matters were originally brought to the attention of the Examiner in a telephone communication initiated by undersigned counsel on August 1, 2007.

Having received no reply to the above referenced request, Applicant telephoned SPE Richard Ridley on November 15, 2007. In a subsequent telephone conversation with undersigned counsel on November 16, 2007, SPE Ridley indicated that the Office acknowledges that the July 18, 2007, Office Action is deficient, but that Applicant should submit a reply to avoid the potential of incurring further extensions of time. SPE Ridley provided assurances to Applicant that, due to the deficiencies in the Office Action, the next action would not be made final. Applicant accordingly submits this reply to the July 18, 2007, Office Action.

Objections to the Drawings and Specification

As indicated above, Applicant is unable to determine whether the Office does or does not object to the drawings and specification. As best understood, however, the basis for a potential objection by the Office is that "planetary gearing" terminology is used in the specification to describe certain structures of the claimed invention, and in the opinion of the Examiner, such terminology is not appropriate. To the extent the Office makes such an objection, Applicant respectfully traverses it.

A planetary gear train, also sometimes referred to as an epicyclic gear train, is one in which "one or more gears orbit about the central axis of the train." "Thus, they differ from an ordinary train by having a moving axis or axes." See Yi Zhang, Susan Finger, Stephanie Behrens, Introduction to Mechanisms, Carnegie Mellon University, at <http://www.cs.cmu.edu/~rapidproto/mechanisms/chpt7.html#HDR123>. A printout of the relevant portion from the referenced website is attached as Exhibit A to the Declaration of Bradley J. Thorson Under 37 C.F.R. § 1.132, included herewith.

In embodiments of the claimed invention, the planet gear arm rotates about an axis that itself orbits about a central axis of the train. For example, in the embodiment of Figure 2, sun gear 174 rotates on post 142 which defines an axis of rotation for the train in relation to the housing. The rotational axis of planet gear portion 198, however is pivot pin 212 which extends through long arm 170. Long arm 170 is also pivoted on post 142 and acts as a planet carrier arm for planet gear portion 198. Thus, as sun gear 174 is rotated by worm 116, planet gear portion 198 is driven by sun gear 174 and rotates around the axis extending through pivot pin 212, which in turn rotationally translates about the axis of rotation for the train extending through post 142. Thus, these embodiments of the claimed invention are exemplary of a classic planetary gear arrangement and the terms used by Applicant in the specification are entirely appropriate. Applicant respectfully requests that the referenced objections not be included in a reissued Office Action.

Claim Rejections Under 35 U.S.C. § 112

Claims 18, 20-23 and 30-35 are said to be rejected under 35 U.S.C. § 112, first paragraph, as failing to meet the enablement requirement. As best understood by Applicant, this rejection stems from Applicant's use of "planetary gearing terminology" in the claims. As discussed hereinabove, however, in that embodiments of the claimed invention incorporate classic planetary gearing structures, Applicant's use of such terms in the claims is appropriate. Consequently, Applicant respectfully requests that this rejection be withdrawn.

Claim Rejections Under 35 U.S.C. § 102

Claim 1 was rejected as anticipated by Winner '913. Applicant respectfully traverses this rejection.

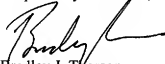
Applicant notes that the pivot pin 22 of Winner '913 has only two sections. Even if it could be considered a "bearing," pivot pin 22 does not have all of the three sections of the claimed bearing which has "a base, a generally cylindrical middle axially extending from the base and with a smaller radius than the base, an upper portion axially extending from the middle and with a smaller radius than the middle, and a shoulder defined between the middle and the upper portion." Since Winner '913 does not disclose all of the claim limitations, it cannot anticipate or render the claim obvious. Applicant respectfully requests that this rejection be withdrawn.

With regard to the other four independent claims and all of the dependent claims, it is not clear whether art based rejections are or not made, or what the basis for such rejections would be. Consequently, it is impossible for Applicant to provide any response with respect to these other claims.

In view of the foregoing, it is submitted that this application is in condition for allowance. Favorable consideration and prompt allowance of the application are respectfully requested.

The Examiner is invited to telephone the undersigned if the Examiner believes it would be useful to advance prosecution.

Respectfully submitted,



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